DATA SCIENCE CONCENTRATION

Management Information Systems, Bachelor of Science in Management Information Systems - Data Science Concentration Requirements

Code	Title	Credits
General Education Requirements - 34 Hours Required		
Minimum of "C-"required		
Fundamental Skills		**15**
Writing – 6 hrs.		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
Oral Communication – 3 hrs.		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
Quantitative Literacy – 3 hrs.		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
Data Literacy – 3 hrs.		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
Breadth of Knowledge		**13**
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
Individual and Social Responsibility		**6**
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
MAJOR REQUIREMENTS - 75 Hours Required		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
All of the Following:		**60**
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY (**)	
CIST 1300	INTRODUCTION TO WEB DEVELOPMENT (^)	
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I (^)	
MATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES (^)	
or MATH 1370	APPLIED ALGEBRA AND OPTIMIZATION WITH DATA ANALYSIS	
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY (**^)	
ACCT 2010	PRINCIPLES OF ACCOUNTING I (^)	
ACCT 2020	PRINCIPLES OF ACCOUNTING II (^)	
ECON 2200	PRINCIPLES OF ECONOMICS (MICRO) (**^)	
ECON 2220	PRINCIPLES OF ECONOMICS (MACRO) (**^)	
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T (^)	
CIST 3000	TECHNICAL WRITING & COMMUNICATION FOR IS&T (^)	
CIST 3110	INFORMATION TECHNOLOGY ETHICS (**^)	
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT (^)	
ISQA 3400	INFORMATION TECHNOLOGY INFRASTRUCTURE (^)	
ISQA 3420	MANAGING IN A DIGITAL WORLD (^)	
ISQA 3900	WEB APPLICATION DEVELOPMENT (^)	
ISQA 3910	INTRODUCTION TO PROJECT MANAGEMENT (^)	
ISQA 4110	INFORMATION SYSTEMS ANALYSIS (^)	
ISQA 4120	SYSTEM DESIGN AND IMPLEMENTATION (^)	
ISQA 4900	FULL STACK DEVELOPMENT (^)	
Business Co-Requirement - Select 1 course from the following:		**3**
ACCT 3080	ACCOUNTING INFORMATION SYSTEMS (^)	
ECON 3200	ECONOMIC THEORY: MICRO (^)	
ECON 3220	ECONOMIC THEORY: MACRO (^)	
ENTR 3710	ENTREPRENEURIAL FOUNDATIONS (^)	
FNBK 3250	PRINCIPLES OF FINANCIAL MANAGEMENT (^)	
MKT 3310	PRINCIPLES OF MARKETING (^)	
MGMT 4030	HUMAN RESOURCE MANAGEMENT (^)	
MGMT 4090	MANAGING COLLABORATIVE ENGAGEMENT (^)	
Data Science Concentration - 12 Hours Required		
All of the following:		**6**
ISQA 4010	BUSINESS INTELLIGENCE (^)	
ISQA 4200	INFORMATION AND DATA QUALITY MANAGEMENT (^)	
Select 2 courses from the following:		**6**
ISQA 4000	SPECIAL TOPICS: INFORMATION SYSTEMS & QUANTITATIVE ANALYSIS (^) [1]	
ISQA 4150	ADVANCED STATISTICAL METHODS FOR IS&T (^)	
ISQA 4730	DECISION SUPPORT SYSTEMS (^)	
Other courses as approved by the MIS undergraduate program committee.		
ELECTIVES		
#Elective hours as required to reach a total of 120 hours		

[1] ISQA 4000 special topic must be related to Data Science. Approval from the MIS undergraduate program committee is required prior to taking the course.